LATE REVISIONS – 9, 10 September 2004 HEARING

ITEM 13 - Amendments to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins for the Control of Salt and Boron Discharges into the Lower San Joaquin River

Following is summary of the late revisions to the proposed Basin Plan amendment. These late revisions are changes from the July 2004 final draft staff report that will be incorporated into the final staff report. Deletions are shown as strike-through text (~~deleted text~~) and additions are shown as underlined text (added text).

Revisions to the Staff Report:

Revisions to the proposed Basin Plan Amendment language (pages 10-21 of the Staff Report)

Item number 4 is modified as follows (underlined text is new):

> "The Regional Board will adopt waste discharge requirements with fixed monthly base load allocations specified as effluent l~~L~~imits for nonpoint source discharges that do not meet conditions specified in a waiver of waste discharge requirements for salinity management. Entities operating under WDRs or that will be required to operate under WDRs in order to comply with other programs, may participate in a Regional Board approved real-time management program if they meet conditions specified in a waiver of WDRs for salinity management, as described in item 3."

All item numbers after item number 5 of the Control Program for Salt and Boron Discharges into the Lower San Joaquin River are renumbered.

The second reference to item 11 in item 12, regarding dilution flows, in the Control Program is modified so that the correct item is referenced: item 9 regarding load trading.

The following text is added to table IV-8 on the bottom of page 18:

> "In addition to the base load allocations or real-time load allocations shown above, a consumptive use allowance (L_{CUA}) is provided to each discharger:
>
> *L_{CUA} in tons per month = discharge volume in acre-feet per month * 230 μS/cm * 0.8293"*

Changes to Chapter 5: Economics

The first sentence in the last paragraph of Section 5 (page 89) has been corrected as follows:

> "Though less expensive options may be available, costs to municipal and industrial dischargers are estimated to be approximately $6.3 millions dollars per year if micro-filtration reverse osmosis treatment is used to meet waste load allocations."

Revisions to Appendix 4: Economics

Table D-4 on page 4-8 corrected as follows

Table D-4: Summary of Management Practice Costs and Anticipated Drainage Volume Reduction

Management Practice	Capital Costs	O & M Costs	Drainage Volume Reduction
Surface Drainage Re-circulation	$812/acre-foot	$55/acre-foot/year	~~15%~~ 100%1
Subsurface Drainage Re-circulation	$250/acre-foot	$50/acre-foot/year	~~100%1~~ 15%
Sequential Drainage Re-use	$938/acre-foot	$200/acre-foot/year	47%
Evaporation Ponds	$340/acre-foot	$50/acre-foot/year	100%[2]
Temporary Retention Ponds (re-operation)	$315/acre-foot	$50/acre-foot/year	100%[4]
Real-time Management	$350,000/system[3]	$100,000/system[3]/year	100%[4]
Landfill Disposal Of Salts (cost per ton)	$200/ton	$25/ton	N/A

1-Assumes that 100% of surface drainage can be re-used.
2-100% of all drainage discharged to evaporation ponds will be permanently disposed.
3-11 systems are estimated to be needed to fully implement real-time management
4-100% of all drainage will either be discharged to the LSJR, re-operated, or discharged to evaporation ponds for permanent disposal.

Revision to Municipal and Industrial Cost Estimates

The following corrections were made on page 4-24:

This represents a total annual cost of $599 ~~$549~~ per acre-foot of treated effluent ($259 capital costs plus $340 for O&M) assuming capital costs are amortized over 20 years at 3% interest. The California State Revolving Fund Program (SRF) provides low interest loan funds (3% for 20 yrs) to address water quality problems associated with discharges from wastewater facilities. …

Applying the $599 ~~$549~~ per acre-foot cost to the 7,365 acre-feet wastewater needing treatment (from Table D-10) yields an annual treatment cost of approximately $4.4 ~~$4~~ million dollars per year for MF/RO treatment. …

The total annual cost of the MF/RO treatment needed to meet waste load allocations, including brine disposal costs, is estimated to be approximately $6.3 ~~$6~~ million dollars per year ($1.9 ~~$1.8~~ million dollars per year for the City of Turlock and $4.4 ~~$4.2~~ million dollars per year for the City of Modesto). …